

In the Specification

[0034] The cable 210 includes a light guide channel 230 for transmitting illuminating light to the camera head 205. The cable 210 further includes data channels 235 for transmitting data to and from the camera head 205 and the CCU 240. Four data channels 235 are depicted in FIG. 2, however it will be obvious to one skilled in the art that fewer or more data channels 235 may be utilized. Image data and control signals are multiplexed in the camera head 205 by the multiplexer 225 for transmission along data channels 235. One of the data channels 235 may be utilized for the multiplexed signal, or any number or combination of data channels 235 may be utilized. The cable 210 is also provided with an protective jacket 245, encasing the light guide channel 230 and the data channels 235. Further in FIG. 2, the cable 210 engages the camera head 205 so as to direct light 270 longitudinally completely through the camera head 205. FIG. 9 depicts a section of the camera head of FIG. 2 showing four channels comprising eight electrical conductors 235 a - h. FIG. 10 is a depiction of a light source 255 mounted within a camera control unit 240.